

AMENDMENTS TO THE CLAIMS:

The following listing of the claims will replace all prior versions and listings of claims in the application.

1-21. (Cancelled).

22. (Previously presented) A system supporting voice communication via a packet network, the system comprising:

- at least one processor capable of receiving, via the packet network, a message requesting setup of a voice call, the message comprising a destination address;

- the at least one processor capable of sending, via a conventional telephone switching network link, signals based upon the destination address requesting setup of the voice call;

- the at least one processor capable of receiving, via the conventional telephone switching network link, signals representing call status;

- the at least one processor capable of establishing communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and

- the at least one processor capable of refraining from establishing communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

23. (Previously presented) The system of claim 22 wherein the destination address comprises one of an Internet protocol (IP) address and a telephone number.

24. (Previously presented) The system of claim 22 wherein the conventional telephone switching network link is an analog communication link.

25. (Previously presented) The system of claim 24 wherein the signals representative of voice comprise modem signals.

26. (Previously presented) The system of claim 22 wherein the call status represents one of a busy condition, a ringing condition, and connection established condition.

27. (Previously presented) The system of claim 22 wherein the establishing comprises converting information received from the packet network for transmission via the conventional telephone switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

28. (Previously presented) The system of claim 27 wherein converting information received from the conventional telephone switching network link comprises:

determining voice activity based upon the information received from the conventional telephone switching network link;

reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and

refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

29. (Previously presented) The system of claim 27 wherein the establishing comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

30. (Previously presented) The system of claim 29 wherein the converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time in order to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

31. (Previously presented) The system of claim 22 wherein establishing voice communication comprises establishing communication of data.

32. (Previously presented) A method supporting voice communication via a packet network, the method comprising:

receiving, via the packet network, a message requesting setup of a voice call, the message comprising a destination address;

sending, via a conventional telephone switching network link, signals based upon the destination address requesting setup of the voice call;

receiving, via the conventional telephone switching network link, signals representing call status;

establishing communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and

refraining from establishing communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

33. (Previously presented) The method of claim 32 wherein the destination address comprises one of an Internet protocol (IP) address and a telephone number.

34. (Previously presented) The method of claim 32 wherein the conventional telephone switching network link is an analog communication link.

35. (Previously presented) The method of claim 34 wherein the signals representative of voice comprise modem signals.

36. (Previously presented) The method of claim 32 wherein the call status represents one of a busy condition, a ringing condition, and connection established condition.

37. (Previously presented) The method of claim 32 wherein the establishing comprises converting information received from the packet network for transmission via the conventional telephone switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

38. (Previously presented) The method of claim 37 wherein converting information received from the conventional telephone switching network link comprises:

determining voice activity based upon the information received from the conventional telephone switching network link;
reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and
refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

39. (Previously presented) The method of claim 37 wherein the establishing comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

40. (Previously presented) The method of claim 39 wherein the converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time in order to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

41. (Previously presented) The method of claim 32 wherein establishing voice communication comprises establishing communication of data.

42. (Previously presented) A system supporting voice communication via a packet network, the system comprising:

at least one processor capable of receiving, via a conventional telephone switching network link, an indication of an incoming voice call;
the at least one processor capable of accepting, via the conventional telephone switching network link, a destination address;
the at least one processor capable of identifying a packet network address based upon the destination address;
the at least one processor capable of sending, via the packet network using the identified packet network address, a message requesting setup of the voice call;

the at least one processor capable of receiving, via the packet network, a message indicating call status;

the at least one processor capable of establishing voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and

the at least one processor capable of refraining from establishing voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

43. (Previously presented) The system of claim 42 wherein the conventional telephone switching network link is an analog communication link.

44. (Previously presented) The system of claim 42 wherein the call status represents one of a busy condition, a ringing condition, and connection established condition.

45. (Previously presented) The system of claim 42 wherein establishing comprises converting information received from the packet network for transmission via the conventional telephone switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

46. (Previously presented) The system of claim 45 wherein converting information received from the conventional telephone switching network link comprises:

determining voice activity based upon the information received from the conventional switched circuit network link;

reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and

refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

47. (Previously presented) The system of claim 42 wherein establishing comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

48. (Previously presented) The system of claim 47 wherein the converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time in order to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

49. (Previously presented) The system of claim 42 wherein establishing voice communication comprises establishing communication of data.

50. (Previously presented) A method supporting voice communication via a packet network, the method comprising:

- receiving, via a conventional telephone switching network link, an indication of an incoming voice call;
- accepting, via the conventional telephone switching network link, a destination address;
- identifying a packet network address based upon the destination address;
- sending, via the packet network using the identified packet network address, a message requesting setup of the voice call;
- receiving, via the packet network, a message indicating call status;
- establishing voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and
- refraining from establishing voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

51. (Previously presented) The method of claim 50 wherein the conventional telephone switching network link is an analog communication link.

52. (Previously presented) The method of claim 50 wherein the call status represents one of a busy condition, a ringing condition, and connection established condition.

53. (Previously presented) The method of claim 50 wherein establishing comprises converting information received from the packet network for transmission via the conventional telephone switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

54. (Previously presented) The method of claim 53 wherein converting information received from the conventional telephone switching network link comprises:

determining voice activity based upon the information received from the conventional switched circuit network link;

reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and

refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

55. (Previously presented) The method of claim 50 wherein establishing comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

56. (Previously presented) The method of claim 55 wherein the converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time in order to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

57. (Previously presented) The method of claim 50 wherein establishing voice communication comprises establishing communication of data.

58. (Previously presented) At least one circuit for use in a telephony device, the at least one circuit operational to, at least:

send a message requesting setup of a voice call to a communication system via a packet network, the message comprising a destination address and information to cause the communication system to, at least:

send, via a conventional telephone switching network link, at least one signal based upon the destination address requesting setup of the voice call;

receive, via the conventional telephone switching network link, at least one signal representing call status;

establish communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and

refrain from establishing communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

59. (Previously presented) The at least one circuit of claim 58, where the destination address comprises at least one of an Internet protocol (IP) address and a telephone number.

60. (Previously presented) The at least one circuit of claim 58, where the conventional telephone switching network link is an analog communication link.

61. (Previously presented) The at least one circuit of claim 58, where the signals representative of voice comprise modem signals.

62. (Previously presented) The at least one circuit of claim 58, where the call status represents one of: a busy condition, a ringing condition, and connection established condition.

63. (Previously presented) The at least one circuit of claim 58, where establishing communication of signals representative of voice comprises converting information received from the packet network for transmission via the conventional telephone

switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

64. (Previously presented) The at least one circuit of claim 63, where converting information received from the conventional telephone switching network link comprises:

- determining voice activity based upon the information received from the conventional telephone switching network link;
- reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and
- refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

65. (Previously presented) The at least one circuit of claim 63, where establishing communication of signals representative of voice comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

66. (Previously presented) The at least one circuit of claim 65, where converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

67. (Previously presented) The at least one circuit of claim 58, where establishing communication of signals representative of voice comprises establishing communication of data.

68. (Previously presented) A method for operating at least one circuit for use in a telephony device, the method comprising:

- sending a message requesting setup of a voice call to a communication system via a packet network, the message comprising a destination address and information to cause the communication system to, at least;

send, via a conventional telephone switching network link, at least one signal based upon the destination address requesting setup of the voice call;

receive, via the conventional telephone switching network link, at least one signal representing call status;

establish communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and

refrain from establishing communication of signals representative of voice between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

69. (Previously presented) The method of claim 68, where the destination address comprises at least one of an Internet protocol (IP) address and a telephone number.

70. (Previously presented) The method of claim 68, where the conventional telephone switching network link is an analog communication link.

71. (Previously presented) The method of claim 68, where the signals representative of voice comprise modem signals.

72. (Previously presented) The method of claim 68, where the call status represents one of: a busy condition, a ringing condition, and connection established condition.

73. (Previously presented) The method of claim 68, where establishing communication of signals representative of voice comprises converting information received from the packet network for transmission via the conventional telephone switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

74. (Previously presented) The method of claim 73, where converting information received from the conventional telephone switching network link comprises:

determining voice activity based upon the information received from the conventional telephone switching circuit network link;
reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and
refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

75. (Previously presented) The method of claim 73, where establishing communication of signals representative of voice comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

76. (Previously presented) The method of claim 75, where converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

77. (Previously presented) The method of claim 68, where establishing communication of signals representative of voice comprises establishing communication of data.

78. (Previously presented) At least one circuit for use in a telephony device, the at least one circuit operational to, at least:

receive at least one message requesting setup of a voice call from a communication system via a packet network, the received at least one message indicative of: the communication system receiving an indication of an incoming voice call and a destination address via a conventional telephone switching network link, and the communication system identifying a packet network address for the telephony device based upon the destination address; and
send at least one message indicating at least call status to the communication system via the packet network, the sent message to cause the communication system to:

establish voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and

refrain from establishing voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

79. (Previously presented) The at least one circuit of claim 78, where the conventional telephone switching network link is an analog communication link.

80. (Previously presented) The at least one circuit of claim 78, where the call status represents one of: a busy condition, a ringing condition, and connection established condition.

81. (Previously presented) The at least one circuit of claim 78, where establishing voice communication between the packet network and the conventional telephone switching network link comprises converting information received from the packet network for transmission via the conventional telephone switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

82. (Previously presented) The at least one circuit of claim 81, where converting information received from the conventional telephone switching network link comprises:

determining voice activity based upon the information received from the conventional telephone switching network link;

reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and

refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

83. (Previously presented) The at least one circuit of claim 78, where establishing voice communication between the packet network and the conventional telephone

switching network link comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

84. (Previously presented) The at least one circuit of claim 83, where converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

85. (Previously presented) The at least one circuit of claim 78, where establishing voice communication between the packet network and the conventional telephone switching network link comprises establishing communication of data.

86. (Previously presented) A method for operating at least one circuit for use in a telephony device, the method comprising:

- receiving a message requesting setup of a voice call from a communication system via a packet network, the received message indicative of: the communication system receiving an indication of an incoming voice call and a destination address, and the communication system identifying a packet network address for the telephony device based upon the destination address; and
- sending a message indicating call status to the communication system via the packet network, the sent message to cause the communication system to:
 - establish voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is received; and
 - refrain from establishing voice communication between the packet network and the conventional telephone switching network link, if call status indicating establishment of a connection is not received.

87. (Previously presented) The method of claim 86, where the conventional telephone switching network link is an analog communication link.

88. (Previously presented) The method of claim 86, where the call status represents one of: a busy condition, a ringing condition, and connection established condition.

89. (Previously presented) The method of claim 86, where establishing voice communication between the packet network and the conventional telephone switching network link comprises converting information received from the packet network for transmission via the conventional telephone switching network link, and converting information received from the conventional telephone switching network link for transmission via the packet network.

90. (Previously presented) The method of claim 89, where converting information received from the conventional telephone switching network link comprises:

- determining voice activity based upon the information received from the conventional telephone switching network link;

- reducing the quantity of information transmitted via the packet network, if voice activity is determined to be below a predetermined level; and

- refraining from reducing the quantity of information transmitted via the packet network, if voice activity is determined not to be below the predetermined level.

91. (Previously presented) The method of claim 86, where establishing voice communication between the packet network and the conventional telephone switching network link comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals.

92. (Previously presented) The method of claim 91, where converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

Appl. No. 10/783,477
Filed: February 20, 2004
Reply to Office action mailed April 17, 2008
Response dated August 18, 2008

93. (Previously presented) The method of claim 86, where establishing voice communication between the packet network and the conventional telephone switching network link comprises establishing communication of data.